31 Incorporated P.O. Box 278 Newcomerstown, OH 43832 USA (740) 498-8324

MATERIAL SAFETY DATA SHEET

24 Hour Emergency Service: CHEM•TEL INC. (800) 255-3924

I. IDENTIFICATION

PRODUCT NAME: Vulcanizing Cement #14-004, #14-008, #14-032, #14-511, #14-512

CHEMICAL NAME: Heptane Natural Rubber CHEMICAL FAMILY: Rubber Compound

FORMULA: N/A MOLECULAR WEIGHT: N/A

SYNONYMS: EDP #0108

DEPARTMENT OF: HAZARD CLASSIFICATION NOS. CFR 49
TRANSPORTATION: CFR 49 SHIPPING NAME: Rubber Compound

CAS#: N/A CAS NAME: N/A

II. PHYSICAL DATA

BOILING POINT: 200° - 209° F FREEZING POINT: N/A SPECIFIC GRAVITY: N/A VAPOR PRESSURE AT 20° C.: N/A VAPOR DENSITY: N/A EVAPORATION RATE: 4.50

PERCENT VOLATILES BY VOLUME: 75 - 85 SOLUBILITY IN WATER (% BY WEIGHT): N/A

APPEARANCE AND ODOR: Cloudy liquid with solvent odor

III. INGREDIENTS

MATERIAL	%	TLV UNITS	S HAZARD	CAS#
Heptane	80 - 90	400 PPM	Not Hazardous	142-82-5
Methylcyelohexane .5		400 PPM		108-87-2
Uncured Natural Rubber	10 - 15			N/A

IV. FIRE AND EXPOSURE HAZARD DATA

FLASH POINT (TEST METHODS): 14F (TCC)

FLAMMABLE LIMITS IN AIR (% BY VOLUME): LOWER: 1.0; UPPER: 7.0

EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, Fire Fighting Apparatus

SPECIAL FIRE FIGHTING PROCEDURES: Use of self contained breathing apparatus is recommended

for fire fighters

UNUSUAL FIRE & HAZARD EXPLOSION HAZARDS: Extremely flammable and may be ignited by heat,

sparks, flame or other source of ignition.

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V. HEALTH HAZARD DATA

EXPOSURE LIMITS TLV, PEL, AND SOURCE: See Section III

ACUTE EFFECTS OF OVEREXPOSURE:

SWALLOWING: May cause irritation of gastrointestinal tract, seek medical attention immediately.

DO NOT give anything by mouth or induce vomiting.

SKIN ABSORPTION: May cause irritation

INHALATION: May cause dizziness, move victim to fresh air, seek medical attention immediately

SKIN CONTACT: May cause irritation upon prolonged or repeated contact EYE CONTACT: May cause eye irritation, flush eyes with clean water

CHRONIC EFFECTS OF OVEREXPOSURE: N/A OTHER HEALTH HAZARDS: N/A

EMERGENCY & FIRST AID PROCEDURES

SWALLOWING: DO NOT induce vomiting. Seek immediate medical advice and / or medical attention SKIN: Wash with soap & large quantities of water. Seek medical attention if irritation persists

INHALATION: Give Oxygen

EYES: Flush with large quantities of water for at least 15 minutes. Seek medical attention

PRIMARY ROUTE OF ENTRY: Contact - Inhalation

NOTE TO PHYSICIAN: Inhalation- If breathing is difficult, dizziness or lightheadedness occur when working

in areas with high vapor concentrations, victim should seek air free of vapors. If continued breathing difficulties occur, administer oxygen until

medical assistance can be rendered.

VI. REACTIVITY DATA

STABILITY

UNSTABLE: STABLE: X CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids or bases and selected amines.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Thermal decomposition in the presence

of air may yield carbon monoxide and / or carbon dioxide.

HAZARDOUS POLYMERIZATION

MAY OCCUR: WILL NOT OCCUR: X CONDITIONS TO AVOID: N/A

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Stop flow. Recover what is possible. Small amounts of spilled material may be taken up with inert material.

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Use NIOSH approved cartridge or gas mask

VENTILATION: Mechanical ventilation to keep product within specified TLV ranges PROTECTIVE GLOVES: Imperable gloves advised. EYE PROTECTION: Safety glasses

OTHER PROTECTIVE EQUIPMENT: Work clothes

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IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep product containers in cool, dry environment. Use and store this product with adequate ventilation.

TRANSPORTATION:

In containers of 32oz. or less, and no more than 18 quarts per master carton, this product is classified as ORM-D (use ORM-D label on master carton)

In containers greater in size than 32 oz. and/or exceeding 18 quarts per master carton, this product must be classified as Flammable Liquid and must be labeled with appropriate red "Flammable Liquid (3)" label.

OTHER PRECAUTIONS:

Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. If contact is made, remove saturated clothing and flush affected areas with water.

X. CARCINOGEN EVALUATION

None of the raw material components of this product are known or suspected to be carcinogens.

XI. MSDS PREPARATION INFORMATION

THIS MSDS WAS PREPARED BY:

Charles Muhs
Technical Advisor
31 Incorporated
100 Enterprise Drive
Newcomerstown, OH 43832

THIS MSDS WAS LAST UPDATED ON: (DATE) Apr. 15, 2003

XII. HMIS RATING

HEALTH:

FLAMMABILITY:

REACTIVITY:

PERSONAL PROTECTIVE EQUIP.:

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